

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A vacuum heat insulator comprising:
a laminate bag, and an insulating core disposed in said laminate bag,
an inside of said laminate bag evacuated to vacuum,
said laminate bag comprising a laminate film,
said laminate film comprising a first support layer, a second deposition layer formed on a surface of the support layer, a third protective layer formed on a surface of the deposition layer, and a fourth seal layer,
said second deposition layer is formed of at least one material of metal and metal oxide,
and
said laminate film comprising at least one feature selected from the group consisting of:
(i) said first support layer comprising a plastic film having a glass transition point of 100°C [[87°C]] or higher,
(ii) said third protective layer comprising a plastic film having a glass transition point of 100°C [[87°C]] or higher,
(iii) said second deposition layer comprising a property of transmitting a high frequency magnetic field, and
(iv) said laminate bag comprising a seal portion formed by junction of the seal layer and the laminate film.
2. (Currently amended) A vacuum heat insulator comprising:
a laminate bag, and an insulating core disposed in said laminate bag,
said inside of said laminate bag evacuated to vacuum,

said laminate bag comprising a laminate film,

said laminate film comprising a first support layer and a second deposition layer comprising at least one of metal and metal oxide, said second deposition film layer disposed on said first support ~~film~~ layer, and

said first support layer comprising a plastic film having a glass transition point of 100°C [[87°C]] or higher.

3. (Currently amended) The vacuum heat insulator of claim 2, wherein said plastic film comprises at least one of polyethylene naphthalate, polycarbonate and polyimide terephthalate and ~~polyphenylene sulfide~~.

4-6. (Cancelled)

7. (Withdrawn) A vacuum heat insulator comprising:

a laminate bag, and an insulating core placed in said laminate bag,

wherein an inside of said laminate bag is evacuated to vacuum,

said laminate bag is made of a laminate film,

said laminate film includes a first support layer, a first deposition layer evaporated on said first support layer, a second support layer, and a second deposition layer evaporated on said second support layer,

each one of said first deposition layer and second deposition layer has at least one of metal and metal oxide, and

each one of said first support layer and second support layer has a plastic film having a glass transition point of 87°C or higher,

8. (Withdrawn) The vacuum heat insulator of claim 7, wherein the surface of the first deposition layer and the surface of the second deposition layer are mutually adhered to each other.

9. (Withdrawn) The vacuum heat insulator of claim 7, wherein said plastic film includes at least one of polyethylene terephthalate and polyphenylene sulfide.

10. (Withdrawn) The vacuum heat insulator of claim 7, wherein said plastic film includes at least one of polycarbonate and polyimide.

11. (Withdrawn) The vacuum heat insulator of claim 7, being used as an insulator for a hot insulating device.

12. (Withdrawn) The vacuum heat insulator of claim 7, being used as an insulator for an electric water heater.

13. (Currently amended) A vacuum heat insulator comprising:
a laminate bag, and an insulating core disposed in said laminate bag,
an inside of said laminate bag evacuated to vacuum,
said laminate bag comprising a laminate film,
said laminate film comprising a first support layer, a second deposition layer comprising at least one of metal and metal oxide, said second deposition layer formed on said first support layer and a third protective layer disposed on said second deposition layer, and
said protective layer comprising a plastic film having a glass transition point of 100°C [[87°C]] or higher.

14. (Currently amended) The vacuum heat insulator of claim 13, wherein said first support layer comprises a plastic film having a glass transition point of 100°C [[87°C]] or higher.

15. (Currently amended) The vacuum heat insulator of claim 13, wherein said plastic film comprises at least one of polyethylene naphthalate, polycarbonate and polyimide terephthalate and polyphenylene sulfide.

16-18. (Cancelled)

19. (Withdrawn) A vacuum heat insulator comprising:
a laminate bag, and an insulating core placed in said laminate bag,
wherein an inside of said laminate bag is evacuated to vacuum,
said laminate bag is made of a laminate film,
said laminate film includes a base material layer, a deposition layer evaporated on said base material layer, a metal foil, and a seal portion layer,
said laminated bag as a seal portion positioned at the end of said laminate film,
said seal portion is formed by bonding of said seal layer, and
said metal foil is positioned at a position excluding at least a part of said seal portion.

20. (Withdrawn) The vacuum heat insulator of claim 19, wherein said deposition layer has an aluminum deposition layer, and said metal foil has an aluminum foil.

21. (Withdrawn) The vacuum heat insulator of claim 19, wherein said base material layer has a polyethylene terephthalate resin.

22. (Withdrawn) The vacuum heat insulator of claim 19,
wherein said base material layer has a first base material layer and a second base material layer,
said deposition layer has a first deposition layer and a second deposition layer, and
said first deposition layer and second deposition layer are adhered face to face.

23. (Withdrawn) The vacuum heat insulator of claim 19, wherein said metal foil is formed into a specified shape by etching.

24. (Withdrawn) The vacuum heat insulator of claim 19, wherein said deposition layer evaporated on said base material layer, metal foil, and seal layer are mutually laminated and bonded.

25. (Withdrawn) The vacuum heat insulator of claim 19, wherein said metal foil is disposed between said deposition layer and seal layer.

26. (Withdrawn) The vacuum heat insulator of claim 22, wherein said metal foil is laminated between said first deposition layer and second deposition layer.

27. (Withdrawn) The vacuum heat insulator of claim 19, wherein said base material layer and deposition layer are laminated between said metal foil and seal layer.

28. (Withdrawn) The vacuum heat insulator of claim 19, being used as an insulator for a hot insulating device.

29. (Withdrawn) The vacuum heat insulator of claim 19, being used as an insulator for an electric water heater.

30. (Withdrawn) A vacuum heat insulator comprising:
a laminate bag, and an insulating core placed in said laminate bag,
wherein an inside of said laminate bag is evacuated to vacuum,
said laminate bag is made of a laminate film,
said laminate film includes a gas barrier layer, a protective layer for protecting said gas barrier layer, and a seal layer, and
said gas barrier layer has a metal having a thermal conductivity of 100 W/m·K or less at 300K.

31. (Withdrawn) The vacuum heat insulator of claim 30, wherein said metal has such a ductility as not to form pin hole in rolled state.

32. (Withdrawn) The vacuum heat insulator of claim 30, wherein said metal has a permeable property of high frequency magnetic field.

33. (Withdrawn) The vacuum heat insulator of claim 30, wherein said metal has a metal foil.

34. (Withdrawn) The vacuum heat insulator of claim 30, wherein said metal has a stainless steel foil of 50 μm or less in thickness.

35. (Withdrawn) The vacuum heat insulator of claim 30, wherein said metal has at least one stainless steel selected from the group consisting of SUS430, SUS304, SUS301, and SUS316.

36. (Withdrawn) The vacuum heat insulator of claim 30, wherein said metal has a titanium foil of 50 μm or less in thickness.

37. (Withdrawn) The vacuum heat insulator of claim 30, wherein said protective layer has at least one selected from the group consisting of polyethylene terephthalate, polyethylene naphthalate, polyimide, and polyphenyl sulfide.

38. (Withdrawn) The vacuum heat insulator of claim 30, being used as an insulator for a hot insulating device.

39. (Withdrawn) The vacuum heat insulator of claim 30, being used as an insulator for an electric water heater.

40. (Withdrawn) A vacuum heat insulator comprising:
a laminate bag, and an insulating core placed in said laminate bag,
wherein an inside of said laminate bag is evacuated to vacuum,
said laminate bag is made of a laminate film,

said laminate film includes a gas barrier layer, a protective layer for protecting said gas barrier layer, and a seal layer,

said gas barrier layer has at least one material of metal and metal oxide, and

said one material has a permeable property of high frequency magnetic field.

41. (Withdrawn) The vacuum heat insulator of claim 40, wherein said one material has a stainless steel foil of 50 μm or less in thickness.

42. (Withdrawn) The vacuum heat insulator of claim 40, wherein said one material has at least one stainless steel selected from the group consisting of SUS430, SUS304, SUS301, and SUS316.

43. (Withdrawn) The vacuum heat insulator of claim 40, wherein said one material has a titanium foil of 50 μm or less in thickness.

44. (Withdrawn) The vacuum heat insulator of claim 40, wherein said protective layer has at least one selected from the group consisting of polyethylene terephthalate, polyethylene naphthalate, polyimide, and polyphenyl sulfide

45. (Withdrawn) The vacuum heat insulator of claim 40, being used as an insulator for a hot insulating device.

46. (Withdrawn) The vacuum heat insulator of claim 40, being used as an insulator for an electric water heater.

47. (Withdrawn) A hot insulating device comprising:
a container for containing the object to be kept hot, and a vacuum heat insulator disposed outside of said container,

wherein said vacuum heat insulator includes a laminate bag, and an insulating core placed in said laminate bag,

an inside of said laminate bag is evacuated to vacuum,
said laminate bag is made of a laminate film, and
said laminate film includes a gas barrier layer, a protective layer for protecting said gas barrier layer, and a seal layer.

48. (Withdrawn) The hot insulting device of claim 47, wherein said vacuum heat insulator is disposed at the outside of at least one of the group consisting of the circumference, lid and bottom of said container.

49. (Withdrawn) The hot insulting device of claim 47, wherein said vacuum heat insulator has a permeable property of high frequency magnetic field.

50. (Withdrawn) The hot insulating device of claim 47, wherein said gas barrier layer has an aluminum deposition layer.

51. (Withdrawn) The hot insulting device of claim 47, wherein said gas barrier layer has a deposition layer of inorganic compound.

52. (Withdrawn) The hot insulting device of claim 47, wherein said gas barrier layer has a plastic having a glass transition point of 100°C or higher and a deposition layer evaporated on the surface of said plastic.

53. (Withdrawn) The hot insulting device of claim 47, wherein said container is formed of a material containing a heat-sensitive metal.

54. (Withdrawn) The hot insulting device of claim 47, wherein said gas barrier layer has at least one stainless steel selected from the group consisting of SU430, SUS304, SUS301, and SUS316.

55. (Withdrawn) The vacuum heat insulator of claim 47, wherein said gas barrier layer has a titanium foil of 50 μm or less in thickness.

56. (Withdrawn) The vacuum heat insulator of claim 47, wherein said protective layer has at least one selected from the group consisting of polyethylene terephthalate, polyethylene naphthalate, polyimide, and polyphenyl sulfide.

57. (Withdrawn) An electric water heater comprising:
a container for containing liquid, a heater for heating said liquid, a tapping route for discharging water, and a vacuum heat insulator disposed around said container,
wherein said vacuum heat insulator comprises a laminate bag, and an insulating core placed in said laminate bag and inside of said laminate bag is evacuated to vacuum,
said laminate bag is made of a laminate film, and
said laminate film includes a base material layer, a deposition layer evaporated on the surface of said base material layer, a protective layer disposed at the face side,
and a seal layer disposed at the back side.

58. (Withdrawn) The electric water heater of claim 57, wherein said base material layer and protective layer are made of a same plastic material.

59. (Withdrawn) The electric water heater of claim 57,
wherein said base material layer has a first base material layer and a second base material layer,
said deposition layer has a first deposition layer and a second deposition layer, and
said first deposition layer and second deposition layer are adhered face to face.

60. (Withdrawn) The electric water heater of claim 57, wherein said laminate film further has a metal foil.

61. (Withdrawn) The electric water heater of claim 60,

wherein said laminate bag has a seal portion having seal layers mutually fused by heat,
and

said metal foil is disposed in a region excluding the seal portion at the end positioned at the container side.

62. (Withdrawn) The electric water heater of claim 57, wherein only the laminate film formed at one side of said laminate bag further has a metal foil, and

said vacuum heat insulator is disposed so that the laminate bag side having the metal foil is positioned at the high temperature side.

63. (Withdrawn) The electric water heater of claim 57, wherein said base material layer has polyethylene naphthalate.

64. (Withdrawn) The electric water heater of claim 57,
wherein said laminate bag has a seal portion having seal layers mutually fused by heat,
and

said seal portion is disposed as being folded to the opposite side of said container.

65. (Currently amended) A vacuum heat insulator comprising:
a laminate bag, and an insulating core disposed in said laminate bag,
an inside of said laminate bag evacuated to vacuum,
said laminate bag comprising a laminate film,
said laminate film comprising a first support layer, a second deposition layer formed on a surface of the support layer, a third protective layer formed on a surface of the deposition layer, and a fourth seal layer,

wherein said first support layer comprises a plastic film having a glass transition point of 100°C [[87°C]] or higher, and said third protective layer comprises a plastic film having a glass transition point of 100°C [[87°C]] or higher.